

**KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST**

FORM G-2
(Rev. 8/98)

TYPE TEST:

- Open Flow
 Deliverability

TEST DATE: 12/13/10

API No. 15-033-21269-0000

Company Thoroughbred Associates		Lease Blackshirt			Well Number 1		
County Comanche		Location 90'E-NE-NE		Section TWP RNG(E/W) Sec. 21-T32S-R19W		Acres Attributed	
Field Mississippi		Reservoir Mississippi				Gas Gathering Connection	
Completion Date 10/06/01		Plug Back Total Depth 5320			Packer Set at none		
Casing Size 5.500	Weight 15.500	Internal Diameter 4.950	Set at 58993	Perforations 5108	To 5118		
Tubing Size 2.500	Weight 6.500	Internal Diameter 2.441	Set at 5043	Perforations	To		
Type Completion (Describe) Tubing		Type Fluid Production		Pump Unit or Traveling Plunger?			
Producing Thru (Annulus/Tubing) Casing		% Carbon Dioxide .180		% Nitrogen 1.090		Gas Gravity- Gg .609	
Vertical Depth (ft) 5043		Pressure Taps Flange			Meter Run Size 3		
Pressure Buildup: Shut in		12/10/10		TAKEN		3:55 PM	
Well on Line: Started		12/13/10		TAKEN		1:45 PM	

OBSERVED SURFACE DATA

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H ₂ O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P _w) (P _t) (P _c)		Tubing WellHead Press. (P _w) (P _t) (P _c)		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						380	394			72.0	
Flow	.750	40.0	72.00	60	60	80	94			24.0	

FLOW STREAM ATTRIBUTES

COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times R_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcfd	GOR	G _m
2.779	54.4	62.58	1.2814	1.0000	1.0044	223		.609

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

$(P_c)^2 = 155.6$

$(P_w)^2 = 9.0$

$P_d = 12.7$

$(P_c - 14.4) + 14.4 =$

$(P_a)^2 = 0.207$

$(P_d)^2 = 2.50$

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$ or $\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	LOG	Backpressure Curve Slope "n" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcfd
155.34	146.60	1.060	.0252	.850	.0214	1.050	235
153.05	146.60	1.044	.0187	.850	.0159	1.037	232

OPEN FLOW 235 Mcfd @ 14.65 psia DELIVERABILITY 232 Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated herein and that said report is true and correct. Executed this the 13th day of January, 20 11

Witness (if any)

For Commission

RECEIVED

JAN 03 2011

KCC WICHITA

For Company
Checked by